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ECONOMIC INDICATORS

NEIGHBOR ISLAND PROFILES

HAWAII COUNTY IN 1987

For the past several years the Island of Hawaii appeared to lag the other counties on the road to economic prosperity. While it has been a much longer road than expected, the Big Island may finally be arriving. Growth in cumulative gross business receipts during the first half of 1987 hit a record $1 billion. This was up a resounding 20 percent from the same period last year, far above the growth rates of the neighboring counties.

Tourism is a major factor in this emerging growth scenario. With over $1 billion of resorts planned, or under construction, and an additional $500 million slated for tourism-related infrastructure development, the Big Isle will be attracting more than its usual share of the visitor market over the next few years.

Agriculture fueled the Big Isle's recent strong economic growth. Sugar production will end up at around the same level as last year, but substantial growth was realized in diversified crops, particularly in macadamia nuts, potted and cut flowers, bananas, guava, and papaya.

The Hawaii Ocean Science and Technology (HOST) park has broken ground and will soon house several commercial high-technology enterprises. Tenants of this 540-acre park will occupy 3- to 20-acre parcels and specialize in a variety of aquaculture projects. Other uses of the HOST park will include the research and development of alternate energy systems, marine biotechnology labs, specialty agriculture, ocean instrumentation, and a visitor center. In addition to on-going closed-cycle ocean thermal energy conversion experimentation, the Natural Energy Laboratory of Hawaii (NELH) is researching alternative uses for the nutrient-rich water pumped through their deep-ocean water pipe.

With fast-paced economic development looming on the Big Island, the inadequacy of the island's infrastructure remains a major issue. Availability of water for existing farmers and future resorts and residents, lack of affordable housing, inadequacy of present sewage and solid waste disposal systems, traffic congestion, and the maintenance of roads and highways are just some of the major concerns of Big Island elected officials and residents.

TOURISM

Visitor counts on the Big Island looked encouraging considering that this was an overall slow year for tourism statewide. Through July, westbound visitor counts held steady, while occupancy rates slipped 1 percent from the 1986 average to 64 percent. The Big Isle's stable performance through 1987 may be attributable to a combination of several reasons including: stepped-up Hawaii Visitors Bureau and county promotional efforts; an unusually high level of volcano activity; the wider appeal of Big Isle sporting events; and increased interest in Mauna Kea observatory activity.

The $360-million Hyatt Regency Waikoloa is in its ninth month of construction, ahead of its scheduled completion date of September 1988. This new resort alone will employ some 1,800 persons and add 1,244 rooms to the hotel inventory of the Kona Coast, effectively doubling the existing number. Other large resort developments in the works include: the 450-room Ritz-Carlton, which has just been approved for construction; and the $350-million, 450-room, Hapuna Beach resort, which is in its final planning stages, and the Kaupulehu Resort, a 600-room hotel just south of the Kona Village.

The existing Sheraton Waikoloa, Mauna Lani, and Westin Mauna Kea resorts are doing well with stable occupancy rates and several sold-out months for the remainder of the year. The Keauhou Beach Hotel and the Kona Lagoon Hotel are being renovated at a cost of $5 million by their new owner Azabu U.S.A.

SUGAR

Overall, the sugar industry is expected to stabilize and possibly rebound in the future despite currently gloomy statistics. Through June, sugar production slipped 5 percent from last year, following a 4-percent drop in 1986. A projected 1987 year-end total of 312,000 tons is 7 percent off last year's total production of 334,170 tons.

Hamakua Sugar's production will be off over 10 percent because of a major plant consolidation consisting of increasing plant capacity to 175,000 tons, updating processing technology to improve processed sugar color, and expanding plant capacity to 200,000 tons. Other plans include increasing electrical capacity from 8- to 10-megawatts, and a pilot plant involving the high-tech processing of bagasse into other products.

Hilo Coast Processing Company (HCPC) production is off in part because of a plant breakdown, which halted

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production earlier this year for over a month. Plant production has also declined due to crop diversification into macadamia nuts. A power-supply contract dispute with HELCO and an Environmental Protection Agency suit over sewage dumping, presently costing the plant several million dollars, makes the company's long-term survival even more questionable.

DIVERSIFIED AGRICULTURE

Next to the visitor industry, diversified agriculture is fast becoming the most important contributor to the economic base of Hawaii County. The industry grew by 9 percent as of June 1987 with macadamia nuts leading the way. C. Brewer's Mauna Loa Macadamia Nut Processing Company, which owns half of all nut-bearing trees on the island, expects their macadamia nut crop to be up 10 percent from last year. A large part of this growth is attributable to increased sales of chocolate covered nuts. The $500,000 in plant expansion and over $4 million spent on advertising in 1986 have paid off, leading to a significant increase in demand for nuts.

While anthurium outshipments have declined through the first half of 1987, the industry remains strong and should rebound to end the year at about the same level as last year. However, tropical flowers and nursery products, through the first half of 1987, saw an increase in the total value of sales to $12.4 million, up 25 percent over sales during the same time in 1986.

The fruit fly problem continues to plague Big Isle papaya growers, but, as of yet, production and sales remain stable. The industry estimates that production for fresh sales will top 60 million pounds this coming 1987-88 fiscal year, representing a sizable increase over last year's total of 50 million pounds.

The industry's biggest problem remains infestation control. Fruit irradiation has been scientifically proven to be the most efficient process and the least damaging to the fruit. Initial feasibility studies for the construction of an irradiation pilot plant have been completed. The study proposes a joint funding agreement between the federal and state governments for $5 million in construction and operating expenses for three years. The industry hopes to have an operational facility in Hilo by 1990.

Hawaii guava growers estimate 1987 production at around 6 million pounds of fruit, a 17-percent increase over the 1986 production total. Due to higher per-acre yields harvested in 1987, this increase in production, combined with an average price advance to 11 cents per pound, resulted in a 24-percent expansion of crop sales value over last year.

The production of bananas through the first seven months of 1987 jumped by 17 percent over the same period last year. Kea'au Farms, the county's largest banana farm, intends to add another 150 acres to their existing 200 acres, in addition to boosting their crop yields to 30,000 pounds per acre. These actions could more than double current output over the next couple of years. Increased efforts in neighbor island as well as mainland marketing will accompany this growth in production.

Coffee production for 1987 is suffering some unexpected losses after a bumper crop last year. The 50 to 60 percent industry-wide decline is due to drought conditions earlier this year. However, with production picking-up and a two-year agreement between Superior Coffee and two Kona coffee cooperatives there is still optimism for Kona coffee in the future.

HIGH TECHNOLOGY INDUSTRIES

Support is growing for a Big Isle space industry. The recently completed Arthur D. Little feasibility study concluded: "A window of opportunity exists in the area of small-scale launch services, and the state would be well advised to capitalize upon this opportunity." It also noted that the southeast region of the Big Isle would be a prime location for such a small-scale space launch facility. As a result, the state, county, and many private concerns are actively moving toward the development of a space industry on the Big Island.

The Hawaii Ocean Science and Technology (HOST) park at Keahole Point has just recently broken ground. The 547-acre park was created by the State of Hawaii as a world-class center for large-scale commercial applications of ocean science and technology, and could provide as many as 2,000 jobs for local residents. A large 12-inch ocean water pipe will give the HOST park tenants a unique opportunity to use this extremely pure, cold, and nutrient-rich ocean water for a variety of commercial purposes such as specialized aquaculture, agriculture, ocean research, alternate energy, and desalination.

West Hawaii's Natural Energy Lab (NELH) is continuing its high-tech ocean research. The main focus of NELH is bringing cold deep-sea water to the surface for aquacultural purposes and for Ocean Thermal Energy Conversion (OTEC). A 40-inch deep-ocean water pipe, funded by the Department of Energy, is currently being constructed to augment the Lab's existing capacity. The Lab is in the process of closing down its closed-cycle OTEC research, opting for the more efficient open-cycle OTEC process. The advantages of the open-cycle process include greater efficiency, by-product production of fresh water, and less biological contamination of the system. A 100-kilowatt open-cycle pilot plant is currently under construction, and is expected to be completed in the next two years. OTEC research is still in its infancy in Hawaii, and is still a long way from producing any large amounts of electricity or water. However, ongoing research in this area continues to produce favorable results.

Aquacultural projects underway at NELH include lobster and oyster cultivation as well a research into possible commercial production of different varieties of salmon and trout, using the cold, nutrient-rich, deep-sea water. Cyanotech has had success in producing micro-algae for health foods, pharmaceutical dyes, and biofertilizers and recently procured two multi-million dollar contracts for further product research and development. Hawaiian Abalone Farms is currently doing quite well with average annual sales of $6 million. With expanding operations within the NELH compound and into the nearby HOST park, the company hopes to increase their share of the $250-million abalone market to 20 percent in the near future.

Atop Mauna Kea, construction of the $95-million W. M. Keck Observatory, housing the world's largest optical/infrared telescope measuring 10-meters in diameter, is in its second year of construction and should be completed sometime in 1990. In addition, the $130 million National New Technology Telescope (NNTT) has recently been approved by the federal government. It is estimated

that the number of telescopes on Mauna Kea will double to 14 by the year 2000, and local employment in this industry could be as high as 500 persons.

Three developments that will certainly facilitate this expansion will be the completion of the summit road project, targeted for completion in 1989, completion of a fiber optic link connecting Halepohaku to the summit microwave communication station, and the approval of a two-year Observatory Technician degree program, proposed by the University of Hawaii, Institute for Astronomy.

ALTERNATE ENERGY

Alternate energy sources provide a considerable amount of energy on the Island of Hawaii. Electrical production from the sugar companies using combinations of bagasse, coal, and oil, is, to date, the most important source, providing an estimated 42 percent of all electricity produced.

However, geothermal power remains the greatest potential source of electrical energy to the Big Isle. Thermal Power Company's contract with HELCO to provide 12.5 megawatts of power by the end of 1989 represents a major commitment by a private company to geothermal development (see Economic Indicator front cover story). A third well that was recently completed has been determined to be commercially viable, but at least six more wells will be needed to provide the total 25 megawatts of power already contracted. Meanwhile, the HGP-A plant, which has been consistently providing 3 megawatts of power, recently completed the installation of a heat exchanger which transfers heat from the geothermal brine to a secondary water system. This heat exchanger is to be used for geothermal by-product research involving glass-making, cloth-dyeing, wood drying, plant germination, and processing of green papayas into powder.

Hawaiian Electric Co.'s $27-million feasibility study of a deep-water electrical transmission cable is expected to be completed in 1990. If the estimated $450-million undersea cable system is installed, it could transmit up to 500 megawatts of geothermal power from the Big Island to Maui and Oahu by the late 1990s. A gubernatorial advisory board was formed to examine developmental issues such as financing the project and organizing its implementation.

Thirty-seven Mitsubishi wind turbines were dedicated in July, completing the Kamao'a Wind Farm project in South Point. The windmills will generate a capacity of 10-megawatts, roughly 10 percent of HELCO's present capacity. The wind farm has a 15-year contract with HELCO to supply 10 percent of the Big Isle's peak electricity demand and about 5 percent of its normal usage. However, wind turbines cannot provide firm or consistent power to the utility company. So wind power will always be limited to reserve or back-up power when available.

CONSTRUCTION

The recent resort development explosion and the supporting infrastructure development has thrust the Big Island's construction industry into boom of unparalleled magnitude. Through June, construction-put-in-place stood at $65 million, a 30-percent increase from the same period last year. A continuation of this boom is supported, in part, by county construction permits. Through July, the value of residential permits increased to $55 million up 41 percent from the same period last year. Added to that, another $20 million in non-residential permits were granted. Moreover, planned construction over the next few years is phenomenal. At the present time, over $2 billion worth of construction, consisting of 4 major resorts, containing some 2,000 rooms, over 4,000 single-family homes, and some 5,000 multi-family condo units are in the final planning stages, and thousands more are proposed. Furthermore, another billion dollars is slated to be spent by federal, state, and county governments on infrastructure to support these proposed projects over the next three years.

GOVERNMENT

The county government faces many issues associated with the rapid development of the island. Infrastructure problems such as water availability, sewage and refuse disposal, traffic congestion, highway maintenance and expansion, and affordable housing are among the top priority items confronting the county.

Lack of an adequate water supply on the Big Island is an especially glaring problem with the droughts that have occurred in the past few years. Inadequate water supply has slowed housing development, since many developers cannot obtain the water commitments necessary for development approval. In an attempt to alleviate this problem the county is planning to drill three wells over the next 18 months, supplying an estimated 2-million gallons of water per day (Kona alone uses around 6 million gallons per day presently).

A problem with the disposal of sewage and solid wastes has also begun to appear. The Kona Sewage Treatment Plant is presently up to capacity, and additional development in the Kona region will require additional sewage plant systems. The County is presently spending $20 million over the next 6 years for a sewer system in Hilo and Kona. A new sewage plant in Kona is expected to be online by 1990. However, maintenance of the existing plants poses problems due to the age of the plants. Privatization of some of the smaller plants is being considered.

The County is also concentrating on the improvement of landfill operations to make more efficient use of existing land. The West Hawaii landfill has only 2 to 4 years remaining. This leaves three alternatives: expand the present landfill; transport the waste to Hilo; or develop a new landfill. In any case, waste reduction measures such as incineration and compacting are being implemented for the time being.

Maintenance and expansion of highways and county roads is also another problem faced by Hawaii. Traffic congestion in Waimea and parking and congestion problems in Kailua-Kona indicate that existing roads cannot handle the greater number of vehicles on the island. Some portions of the 975 miles of county roads are unpaved, and there are problems of inadequate drainage along many highways and streets. Impending visitor growth will greatly intensify the existing transportation dilemma. Improvements to the road systems of Hawaii are limited, however, because of insufficient funds. Ideally, $3,600 per mile is needed for highway maintenance, but the present budget allows for only $1,500 per mile.

The county is addressing the island housing shortage, in part, with a pilot project in Kealakehe, between the Keahole Airport and Kailua-Kona. It will consist of a police station, boat harbor, sewage-treatment plant, golf course, schools, and expanded infrastructure, to go along with its 3,000 affordable homes.

In August, the County Council gave its backing to the State Department of Transportation's plan to lengthen Keahole Airport's existing runway as a part of a 20-year, $156 million expansion plan for the facility. The much needed expansion has crossed some major hurdles and construction looks imminent.

The county is laying the ground work for business development in Hilo and the surrounding area. Some planned projects include an enterprise trade zone, a foreign trade zone, and a cargo transport and distribution center at Hilo airport. In the enterprise trade zone, the county intends to offer businesses credits on taxes and insurance, exemption from excise taxes, business promotion, and reduced red tape in business start-ups and building permits.

SUMMARY

It appears that the Island of Hawaii has finally arrived in its long trek down the road to economic prosperity. Basic economic indicators as well as most industry statistics point to the growing strength of Hawaii's economic base. The overall upbeat feeling on the island is well founded. The visitor industry is laying the ground work for what appears to be tremendous growth ahead. Diversification and increased productivity in sugar and diversified agriculture have taken place. Further developments at NELH, the HOST park, the space industry, and the Mauna Kea Observatory suggest an increasing contribution of high-tech industries to the island's economic base. Renewable energy projects continue their important world-class research.

These developments will have enormous implications for economic growth and job creation. Because they will be occurring on both the east and west sides of the county, a more balanced pattern of development can also be expected in the future. Clearly, much will need to be done to accommodate the needs of a growing population and economy. But, with increased cooperation between government, business, and the community, the outlook appears brighter than ever for the economy of Hawaii County.

Hawaii County Statistics

	Unit	Period	1982	1983	1984	1985	1986	Jan.-July 1987	% change Jan.-July 1987/1986	% change Annual 1986/1985
Population, Resident	number	July 1	100,130	102,880	107,169	109,159	111,800	n.a.	n.a.	2.4
Civilian Labor Force	number	mo. avg.	45,450	46,600	46,850	48,000	50,850	53,550	3.3	5.9
Employment	number	mo. avg.	41,050	42,350	43,100	44,100	47,000	50,050	5.3	6.6
Unemployment	number	mo. avg.	4,450	4,300	3,750	3,250	3,850	3,550	−17.4	−9.4
Unemployment Rate	percent	mo. avg.	9.8	9.2	7.7	8.5	7.6	6.6	−20.5	−10.6
Total Job Count	number	mo. avg.	37,800	38,600	39,400	40,050	43,100	45,450	3.4	7.6
Gross Business Receipts	mil. $	total	1,246.2	1,380.9	1,569.8	1,594.5	1,642.4	1,009*	19.6	3.0
State Tax Collections	thous. $	total	52,484	65,787	73,867	79,288	92,073	60,427	12.0	16.1
Visitor Expenditures	mil. $	total	200.9	277.2	248.9	285.9	343.8	n.a.	n.a.	20.3
Estimated Visitor-Days	thous.	total	678.2	714.0	760.9	697.4	787.6	473.1	−0.1	12.9
Hotel Inventory, Rm-units	number	February	7,167	7,469	7,149	7,511	7,280	7,328*	−2.4*	−3.1
Hotel Occupancy	percent	mo. avg.	44.2	46.3	55.6	57.6	62.9	57.4	0.5	9.2
Construction Put in Place	thous. $	total	78,707	78,112	80,465	81,102	95,769	62,341*	28.7	18.1
Private Permits	thous. $	total	75,209	88,015	90,347	121,439	231,501	73,406	−59.9	90.6
Residential (Private)	thous. $	total	61,056	56,852	64,370	83,554	69,106	52,994	35.1	−17.3
Non-Residential Permits	thous. $	total	14,153	31,163	25,977	37,885	162,395	20,412	−85.8	328.7
Public (Federal) Permits	thous. $	total	22,919	20,153	23,057	18,520	37,716	23,530	25.7	103.7
Real Estate Sales:										
Single Family *	number	total	281	378	325	416	565	341	24.0	35.8
Average Price	dollars	cum. avg.	96,249	91,796	89,036	93,775	102,141	114,227	13.6	8.9
Condominium	number	total	58	127	95	93	142	111	42.3	52.7
Average Price	dollars	cum. avg.	123,200	95,535	91,019	97,718	104,186	138,737	53.3	6.6
Sugar Production (raw sugar tons)	thous. tons	total	369	392	391	319	329	126*	−6.0	3.1
Diversified Crops and Livestock	thous. $	total	89,121	91,824	91,215	101,277	n.a.	n.a.	n.a.	n.a.
Diversified Crops*	thous. $	total	65,344	67,951	67,982	79,155	n.a.	n.a.	n.a.	n.a.
Livestock	thous. $	total	23,777	23,873	23,233	22,122	n.a.	n.a.	n.a.	n.a.

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ECONOMIC INDICATORS

NEIGHBOR ISLAND PROFILES

KAUAI COUNTY IN 1987

Following a spectacular year in 1986, the Kauai economy has shifted to more moderate rates of growth in 1987. Gross business receipts through August came to $511 million, up 0.2 percent from the same period last year. Tax collections grew modestly with the September total two percent higher than it was last year. Kauai's visitor count through September managed to increase three percent over 1986, despite the statewide slowdown in visitor counts.

The county population is also on the rise with the fastest growth rate in the state. In 1986 the resident population at 46,400 people, 4 percent higher than 1985. However, the economy is already reaching full employment. The unemployment rate through September fell to 4.3 percent. The total job count grew by 4 percent as of September, while the civilian labor force increased only two percent during the same period. All segments in the economy are having a difficult time finding qualified employees.

TOURISM

Kauai's visitor industry reached a milestone in December of 1986 when it hosted its one millionth guest. The final 1986 count for westbound visitors came to 1,014,590, 21 percent higher than the 1985 count. Visitor expenditures also rose 27 percent. It appears Kauai will exceed one million visitors again in 1987 with the cumulative total through September 3 percent ahead of last year.

Hotels on Kauai in 1986 had their best occupancy rates since 1978. Kauai's nearly 6,000 hotel rooms were 78 percent occupied on average, up 20 percent from the previous year. This year, the cumulative total through September is 76 percent, down 3 percent from 1986. South Kauai is experiencing an 81-percent occupancy rate, while hotels in east Kauai are at 74-percent occupancy.

Hotels in the Poipu area, optimistic that Kauai's visitor industry will continue to do well, are investing in improvements. The Poipu Sheraton is spending $15 million for a 112-room addition. Stouffer Hotels, the new owners of the Waiohai and Poipu Beach Hotels, plan to spend $4 million on improvements. Sports Shinko of Japan, the owners of the Kiahuna Golf course, is planning a 9-hole expansion. The Poipu Beach Resort Association, which has grown to 155 members, is involved in road beautification, park and harbor expansion, and marketing of the Poipu area. The association is focussing its promotional efforts on honeymooners, golfers, travel agencies, and repeat visitors to Kauai. Several new projects are slated in the Poipu area as well. A 600-room Hyatt hotel on Shipwreck Beach will break ground in 1988. Lawai Beach Resorts is planning to add 60 more condominium units in the near future. These projects will increase Poipu's visitor plant by 41 percent once they are completed.

Occupancy at the Sheraton Princeville on the northern end of Kauai is averaging in the high 60-percent range in 1987, after coming off occupancy rates in the high 70-percent range in the first year of operation in 1986. The exceptional start was due to marketing and promotion prior to the opening of the hotel, and a successful grand opening. Higher room rates, however, between $160 and $250 per day, are to blame for the drop in occupancy this year. To offset this increase in rates, capital improvements are being planned for the hotel even though it is only two years old. The hotel will be increasing its advertising and promotion this year and in 1988 as well. Added attention will be paid to the Japanese market, which has not been as strong as the Sheraton's principal mainland markets of California and Florida.

Another first for Kauai was the inauguration of helicopter tours to Niihau this year. Tours to the "Forbidden Island" are $135 or $235 per person depending on which route is chosen. The helicopters land on Niihau, but the passengers are not allowed to explore the island beyond the landing sites. The money earned from the tours will be used to defray the cost of operating the helicopters, which are also used as air ambulances and ranch vehicles.

The top story in the Kauai visitor industry is the opening of the Westin Kauai at Kalapaki Beach. It includes 847 rooms (with rates from $190 to $1,500), a 2-acre reflecting pool, a swimming pool complex with five jacuzzis, and over $2 million worth of artwork scattered throughout the grounds. Four restaurants and nine shops in the hotel are now open, and two more restaurants are scheduled to open in December.

This transformation of the old Kauai Surf Hotel is only Phase I and II of what will eventually be a 580-acre "mega-resort" called the Kauai Lagoons. In comparison, all of Waikiki is approximately 620 acres in land area. Phase III will encompass 40 acres of lagoons, two commercial areas with over 47,000 square feet of retail space, and two championship golf courses when completed in late 1988. Phase IV will be the construction of the second hotel, also to be operated by Westin, on 160 acres of land that will add another 750 rooms to the area. Target completion date is mid-1990. More than $350 million will have been spent by the time the project is completed.

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SUGAR

The sugar industry had a mixed year in 1986. Total sugar production came to 241,086 tons, down 0.4 percent from 1985. In 1987, the picture remains uncertain. Kekaha Sugar Co., employing 350 people, expects a record crop in 1987 of 56,700 tons. New cane varieties and ample water supplies combined to increase tons of sugar per acre (TSA) by 7 percent to 14.5 TSA. Olokele Sugar Co. with its 222 workers is predicting an estimated 33,000 to 33,600 tons processed at their mill in 1987.

Lihue Plantation, Kauai's largest sugar grower, is not having as good a year. Installation of a new belt transfer system and improvements in their irrigation system left no time for routine, but necessary, repairs and maintenance of the factory. This year the plantation is facing problems affecting mill capacity. This, combined with poor weather, has drastically reduced production figures for 1987. The plantation forecasted 79,000 tons this year. Now it is hoping to get 60,000 tons. Yields have increased, however, from 10.3 to 11.3 TSA.

McBryde Sugar Co. is expecting its second largest crop ever in 1987. Production should increase 9 percent over last year to 59,000 tons. Some acreage carried over from last year's crop, good weather, and improved varieties helped increase the yield from 9.8 TSA in 1986 to over 10 TSA.

Even with these large harvests, McBryde and Kekaha Sugar Co. are continuing their ventures into diversified agriculture. Kekaha is experimenting with several different crops on a 14-acre plot, including coffee, cocoa, Chinese taro and several varieties of protea.

McBryde is a little further along in its diversification plans. Some of its sugar cane have been replaced by macadamia nut trees. The plantation's first harvest will take place this year on a 17-acre plot that was planted in 1984. About 3,000 pounds of macadamia nuts are expected. By the spring of 1988 macadamia nuts will cover 580 acres.

McBryde is also experimenting with coffee and tea. Ten acres of Kona coffee have been planted, and will be ready for harvest next year. About 150 pounds are expected. In addition, Brazilian coffee beans will be planted on 140 acres at eight different sites to check their yields. If coffee proves to be viable, the next step will be to look into mechanical harvesting methods and to develop a marketing strategy. Tea has been planted on seven acres of plantation land. About 35 different types of tea are being tested. The company hopes to have a decision on the viability of tea as a commercial crop by 1989.

Ultimately, McBryde is looking for an alternate crop that is compatible with plantation agriculture. It must take up at least 500 acres of land. Gross revenues from the crop must be at least $1 million, with net revenues of at least $200,000. Finally, it must be an exportable crop.

DIVERSIFIED AGRICULTURE

Diversified agriculture on Kauai has been making a comeback since Hurricane Iwa in 1982. In 1986, total crop value came to $6.5 million, up 4 percent from 1985. This is the third year in which total crop value has increased. However, the situation is bleaker in 1987. Vegetable and melon production declined 0.5 percent in 1986, and it looks like this decline will continue into 1987. Papaya is holding its own. Best Fruits, the island's papaya packing and marketing cooperative, will handle between 1.3 and 1.5 million pounds of papaya in 1987, about the same as in 1986. Of the 25 growers and 500 planted acres existing in 1984, only 8 growers and 332 planted acres remain. One obstacle preventing papaya growers from expanding is the $1.5 million debt they are paying off for their packing facility. With only a fourth of its total capacity being utilized at present, the fixed cost of the facility is cutting into the farmers' returns. That return is about 15 cents per pound now, and is not enough for farmers to expand on.

Other crops are doing well on Kauai in 1987. Banana growers, while having ups and downs in production, have enjoyed a steady increase in the value of their crop. In 1986, value of sales increased by 2 percent over the previous year. This trend will likely continue in 1987 as careful monitoring of the banana crop has prevented saturation of the market.

Guava has become a growth crop for Kauai. Kilauea Agronomics Inc., the state's largest guava producer, is in the envious position of not having enough fruit to meet demand. Even after doubling production in 1986 to 9.6 million pounds and conservatively estimating another 4 percent increase in 1987, there is still not enough guava to meet demand. Kilauea Agronomics has added another 150 acres of guava trees to the existing 330 acres. They should come into production in 1988 or the following year. All of C. Brewer's available land has been exhausted and additional sources are being sought. To keep up with the increased output, $1.8 million have been spent so far this year on upgrading their facilities. The processing plant is being enlarged fivefold this year, a new freezer is being installed, and improvements will be carried out on the warehouse and the fruit receiving area in 1988. The success of Kilauea's guava enterprise is due to its joint venture with Ocean Spray. Through Ocean Spray, Kilauea Agronomics has been marketing a guava juice drink since 1985 and a guava-passion fruit blend since the beginning of this year. Both products are doing well in U.S. markets.

Taro is in the same position as guava with demand outdistancing supply. Chinese taro is especially in demand for the manufacturing of taro chips. The county has allocated $15,000 to help taro farmers get started.

Other crops which show potential for Kauai are flowers and nursery products. Kauai produced over $1 million worth of floricultural products in 1986, but still imported 60 percent of the cut and lei flowers used on the island. The common practice is to fill orders using off-island sources first, then tapping local growers to satisfy any excess demand. The Kauai Economic Development Board is investigating ways to reverse that practice with a flower import-substitution feasibility study. It points out the need for a central marketing agency on Kauai, similar to a produce wholesaler or middleman. Its function would be to collect the products from the different growers and take orders from the various retail merchants. Once this agency is in place, not only would imported flowers be replaced by local ones, but national and international exports would become possible.

CONSTRUCTION

1987 will be another year of double-digit growth for the construction industry as construction-put-in-place through August increased by 19 percent over the same period in 1986. Most of the activity has been on nonresidential projects like the Westin Kauai, the Kukui Grove Office Complex, and military construction at the Pacific Missile Range Facility.

Private permits authorized figures indicate this emphasis on commercial construction is changing. As of September 1987, the value of residential private permits authorized increased 52 percent, while the value for non-

residential permits decreased 21 percent. There will still be some major commercial projects in the next 2 years, however, as Ventura Development Corporation's $135 million 605-room Hyatt Regency Hotel will be breaking ground in 1988 on 40 acres of land. Construction of the Kauai Lagoons resort will continue until 1990. Approval is being sought for a 27-acre expansion to the Kukui Grove Center and a commercial/recreational area on another 27 acres nearby. It will contain a driving range, bowling alley, and multi-use park. Construction will begin next year if approval is granted.

Increased housing construction will help alleviate one of Kauai's major problems—a severe housing shortage. The county's housing inventory is nearly depleted, and it is becoming more difficult to find a house to rent or buy at any price. Prices are starting to edge up in response to this pressure. The average price for single family homes is up by 5 percent as of September 1987, and condominium prices have seen a 28-percent increase over 1986. Rental rates are reportedly "going through the roof."

Every segment of the economy is feeling the housing crunch. The Westin Kauai has a standing order for any rental units that become available in the Hanamaulu area. The sugar plantations are finding it difficult to relocate their workers outside the plantations. Housing is the Navy's most pressing need. Some employees of the Pacific Missile Range Facility have to commute all the way from Kalaheo because there isn't any housing closer to the base.

The county has several projects which will help alleviate the shortage. One project with the Hawaii Housing Authority is slated for Hanamaulu, as well as one with Grove Farm in the Kilauea area. Grove Farm has completed and sold out its Komohana subdivision on 23 acres in Puhi. Its 41-acre Ulukou housing development will be completed this year. To date, half of the lots have already been sold. A 40-acre multi-family project near Kauai Community College is about to get underway as well. Princeville Development Corp. has received approval to start Phase II of their development plan. It includes 50 to 55 upscale single-family lots that will be completed in the summer of 1988.

INFRASTRUCTURE

Kauai's infrastructure needs are a combination of the old and the new in 1987. Still plaguing the county is its unfinished sewer system. There isn't a complete county sewer system on the island yet. Koloa, Kapaa, and Poipu do not have any sewer system, and it will take 20 years to install them. The county has made sewer system improvements one of its priorities with several projects in the works. A Waimea system is being completed this year. Funding is being appropriated for a system in the Fairview/Rice Camp area in Lihue with construction to begin in 1988. There are two systems in the planning phase, one for Kapaa and one for Hanapepe town.

The county water system has caught up with demand, and is now preparing for the future. The Board of Water Supply's budget calls for $4.9 million in water development projects that will add 5 million gallons a day to capacity. This additional capacity will be enough to lift the moratoriums on development that are now in effect for Haena, Wailua-Kapaa, Kalaheo, and Anahola by 1988.

Electricity generation has been keeping pace with demand even in the face of significant growth. There was a 9 percent load increase in 1986 over 1985. A 4-percent increase is projected for 1987, while a 7-percent increase is forecasted for 1988. Both the number of customers and average use per customer have gone up recently causing this growth in demand. To stay ahead of this growth Kauai Electric is planning to install new diesel generating equipment by 1990. It will add 12 megawatts to capacity.

Kauai Electric's other sources of electricity will remain stable in the near future. Lihue Plantation, which supplies 75,000 mwh/year, by burning bagasse, is not making any investment to enlarge its generating capacity, and will have difficulty meeting its power commitments this year without burning oil because of the small size of its harvest. Hydroelectric development is at a standstill with one project being dropped, and two others several years away. Only the Lumahai and Wailua projects could soon add to the output of Kauai's seven existing hydro plants, but no progress has been made recently.

Inadequate roads are Kauai's new infrastructure problem. With the number of cars increasing an average of 5 percent every year in the 1980s, only recently has the problem become acute. In 1986, 40,585 cars were registered on Kauai. In 1987, 44,000 registrations are expected. State and county roads are already substandard for the load, and no plans were made for the increased traffic in the county general plan. All this is pointing to eventual traffic tie-ups to rival those on Oahu.

The county has only one major road project in 1987 and that is the Hanamaulu Bypass road. The rest are only repair and maintenance projects and "band-aid" improvements to keep the situation from becoming unbearable. There is not much else the county can do at the present time since most of the inadequate roads are under state jurisdiction. That means the county can only suggest what improvements need to be made, but it is up to the State Department of Transportation to go ahead and make them. With priorities elsewhere in the state, DOT action on Kauai has been limited.

RETAIL TRADE

Reflecting the moderate growth in the visitor industry, retail sales in Kauai saw a 2-percent increase as of July of 1987.

Kauai's major shopping centers are facing both increased retail activity and high demand for retail space. The Coconut Plantation Shopping Center, serving mostly visitors to Kauai, is 100 percent leased out for the first time in its history. Gross sales were up 7 percent in 1986, and it looks like 1987 will be slightly above last year. The Kukui Grove Center has 98 percent of its 311,000 square feet of rental space leased out. Gross sales increased 13 percent in 1986. It is expected to go up another 7 to 12 percent in 1987.

The opening of the Westin Kauai brought with it nine new shops on 20,000 square feet of retail space. Two other sites, called the Art Landing and the Fashion Landing, are scheduled to open in July 1988. Combined, they will have 48,000 square feet of retail space for approximately 40 upscale shops. Both sites should be leased out by December. Besides the Westin, new shopping centers are being planned for the Kapaa area at Waipouli and Koloa. The Koloa development will be called the Koloa Plantation Marketplace and encompass 51,252 square feet of commercial space.

MILITARY

The Pacific Missile Range Facility (PMRF) at Barking Sands in west Kauai continues to contribute its share to the economy of Kauai. Conducting military training and

weapons testing in the air, on the surface, and underwater, the missile range employs about 300 people, and is home to seven companies including the National Bureau of Standards and the Department of Energy.

The base had an operating budget of nearly $39 million for fiscal 1987 that ended September 30. Most of it went to the purchase of goods and services in the local economy. The operating budget for fiscal 1988 will be 16 percent greater at $45 million, including $16 million for expansion of the facilities on the base. Much of that money will be going to local contractors. PMRF is also responsible for attracting a large number of visitors to Kauai. A majority of the crews that use the missile range, and their families, stay at hotels in Poipu. Last year an estimated $9 million was injected into the economy by visiting crews.

Late in 1986, a dispute over the contract awarding process erupted between Dynacorp, the present civilian contractor maintaining the base, and the apparent low bidder RCA. Finally in July, a court order declared past bids invalid and ordered a new round of open bidding for the one-year $25 million contract with four, one-year options. The new contractor will be chosen by August 1, 1988. Dynacorp will remain in place for one more year.

CONCLUSION

The Kauai economy, led by its visitor industry, grew considerably in 1986. It appears growth will continue in 1987 with visitors to Kauai up 3 percent over last year, construction activity 19 percent higher, and the military increasing its input into the economy.

This prosperity is bringing with it some ills. An admirably low 4.4 percent unemployment rate is turning into a labor shortage. Concentration on nonresidential construction has led to an insufficient housing inventory. An increase in the number of cars is overtaxing the road system.

Indeed, Kauai is at a crossroads in its development. Its economy is on the verge of tremendous growth. With careful attention to the issues generated by this growth, and foresighted planning, Kauai should continue to thrive as it has in 1986 and 1987, and could be a model for the other counties to follow in the years to come.

Kauai County Statistics

	Unit	Period	1982	1983	1984	1985	1986	Jan.-Sep. 1987	% change Jan.-Sep. 1987/1986	% change Annual 1986/1985
Population, Resident	number	July 1	41,905	43,059	44,167	44,781	46,400	n.a.	n.a.	3.6
Civilian Labor Force	number	mo. avg.	20,850	21,650	21,300	22,000	23,100	23,500	1.7	5.0
Employment	number	mo. avg.	19,150	20,000	19,800	20,500	21,700	22,500	4.2	5.9
Unemployment	number	mo. avg.	1,700	1,650	1,500	1,500	1,400	1,000	−33.3	−6.7
Unemployment Rate	percent	mo. avg.	8.2	7.7	7.0	6.8	6.0	4.3	−32.8	−11.8
Total Job Count[1]	number	mo. avg.	18,300	18,900	18,950	19,900	20,900	21,600	3.6	5.0
Gross Business Receipts	mil. $	total	467.6	536.3	548.1	599.0	739.2	511.2*	0.2*	23.4
State Tax Collections[2]	thous. $	total	22,166	22,482	28,261	33,793	43,420	34,083	2.1	28.5
Visitor Expenditures	mil. $	total	210.6	250.8	359.4	407.9	516.9	n.a.	n.a.	26.7
Estimated Westbound Visitors	thous.	total	733.3	692.1	814.6	835.6	1,014.6	788.8	2.5	21.4
Hotel Inventory	number	Feb.	5,147	4,193	5,313	5,656	5,922	5,956	0.6*	4.7
Hotel Occupancy	percent	mo. avg.	57.2	57.2	63.0	64.8	77.6	76.1	−2.9	19.8
Construction Put In Place	thous. $	total	28,965	45,265	26,753	30,219	35,959	29,985*	19.1*	19.0
Private Permits	thous. $	total	44,236	137,852	52,735	63,888	93,475	84,186	8.6	46.3
Residential Permits	thous. $	total	28,027	71,016	39,065	47,050	42,046	47,458	52.0	−10.6
Non-Residential Permits	thous. $	total	16,209	66,836	13,670	16,838	51,429	36,728	−20.7	205.4
Public Contracts Awarded	thous. $	total	25,061	7,881	38,058	15,346	13,065	19,273	55.6	−14.9
Real Estate Resales										
Single-Family	number	total	39	55	71	90	162	135	31.1	80.0
Average Price	dollars	cum. avg.	112,518	124,539	132,857	146,375	140,697	147,215	4.9	−3.9
Condominium	number	total	27	28	42	78	170	159	26.2	117.9
Average Price	dollars	cum. avg.	162,380	141,964	138,848	115,987	101,767	124,332	27.7	−12.3
Sugar Production, raw sugar 96°	thous. tons	total	217	204	217	242	241	171	−7.6	−0.4
Diversified Crops and Livestock	thous. $	total	9,478	9,359	11,154	11,370	11,735	n.a.	n.a.	3.2
Diversified Crops[3]	thous. $	total	4,754	4,248	5,951	6,299	6,531	n.a.	n.a.	3.7
Livestock	thous. $	total	4,724	5,111	5,203	5,071	5,204	n.a.	n.a.	2.6

[1] Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once.
[2] Totals do not include property taxes.
[3] Compares February, 1987 to February, 1986.
[4] Total crops excluding sugar.
n.a. = not available.
* Figure reported is for Jan.-Aug.

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ECONOMIC INDICATORS

COUNTY PROFILES

HONOLULU COUNTY IN 1988

First Hawaiian Bank is proud to present the inaugural installment of the Honolulu County Report. This report will be published annually, and completes First Hawaiian's series of in-depth studies on the counties of the 50th state.

Honolulu, as the capital of the State of Hawaii, is truly the gathering place of people, capital, and entrepreneurial ability in the state. Despite the fact that the City & County of Honolulu constitutes only 10 percent of the land area of the state, Honolulu's population is three times larger than all the other counties combined at 816,700 persons. Nearly 80 percent of the state's gross business receipts are produced by economic activity on Oahu. This, in turn, generates 84 percent of the state's tax collections.

In 1987, gross business receipts in Honolulu totalled $25 billion, up by 12 percent over 1986, while tax collections increased by 16 percent to $2 billion. Drawing from the largest population base in the state, Oahu's civilian labor force numbered 384,100 persons, 4 percent larger than in 1986. Most of this labor force was employed in 1987 as the economy generated 4 percent more jobs than the previous year. This lowered the island unemployment rate to 3.5 percent, the lowest in the state.

Oahu's economy is the most diverse in the state. Like the neighbor islands, however, it still relies heavily on tourism and construction. When tourism and construction have a good year, the rest of the economy usually does too. This was the case in 1987 with both tourism and construction expanding over 1986, leading the whole economy to another prosperous year.

VISITOR INDUSTRY

The major factor last year in Oahu's visitor industry was the increase in total eastbound visitors, who numbered 1.6 million on a statewide basis, up by 18 percent over 1986. The westbound visitor count on Oahu, however, was down by 2 percent to 3.1 million.

The poor showing in the westbound market can be attributed to several factors—the October stock market crash, a slowing economy, higher room rates, and tough competition from Mexico, with its similar climate and attractive exchange rate.

Japanese visitors have been coming in greater numbers due to the favorable exchange rate, as well as aggressive advertising by the industry. Over one million Japanese visited Honolulu in 1987, making Hawaii the first overseas destination to host a million Japanese travelers in one year.

Thanks to the fact that the Japanese are predominantly "Waikiki visitors" Honolulu was the only county to show an increase in hotel occupancy of 2 percent in 1987 to 86.8 percent. Waikiki hotel occupancy was higher at 87.2 percent. The diversity of Waikiki's visitor plant also helped. While other counties are focussing on the top segment of the market, and experienced declines last year, Waikiki is maintaining a more diversified cross section of lodgings.

Japanese tourists have been good for retailing. They spent $366 a day compared to $102 a day for the average westbound visitor in 1987. Royal Hawaiian Shopping Center, which caters almost entirely to tourists, saw its sales increase by 50 percent in 1987, with the big push coming from Japanese spenders. Quality American and European boutique shops are doing well.

The International Market Place, which specializes in lower priced goods for tourists, also saw a rise in sales even without the Japanese being a major buying force. Of the 400 mostly small owner-operated businesses in the mall, those selling T-shirts and inexpensive jewelry were doing well.

Duty Free Shoppers, the state's largest retailer, expects the upward trend in Japanese visitors to continue. Sensing the potential in this market, it will be paying $1.1 billion over the next five years to the state to maintain its duty-free concession at the airport.

The increase in Japanese visitors has not been a blessing for all segments of the tourism industry. Because eastbound visitors don't rent cars, most rent-a-car firms on Oahu were only marginally profitable in 1987.

This pattern of lower westbound arrivals and increased eastbound arrivals is likely to continue into 1988. First quarter visitor counts show westbound arrivals continuing to lag behind 1987 with a cumulative total of 716,530 persons, 8 percent below last year. In an effort to reverse this trend, Pleasant Hawaiian Holidays, the largest tour packager to the islands has slashed its rates to increase demand. The Japanese market, on the other hand, is pushing the eastbound count 20 percent higher than the previous year with a total through March of 437,710 persons. Hotel occupancy for the first quarter, like the westbound visitor count, was also down for Oahu. Oahu's occupancy rate through the first three months of 1988 came to 88 percent, down by 5 percent from 1987.

Even with the surge in the eastbound market, the westbound market continues to be the dominant segment

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because of its size. Now, the mix is 80 percent westbound, 20 percent eastbound. But, Japanese tourists outspend Westerners four to one. Thus, in spite of the expectation for low growth in aggregate visitor counts in 1988, the strength in Japanese visitors will maintain tourism's contribution to the Hawaiian economy.

CONSTRUCTION

The construction industry had a very good year in 1987. While lacking some of the big projects that characterized neighbor-island construction, Oahu shared in the prosperity. Construction-put-in-place amounted to $1.9 billion for 1987, up by 17 percent from the previous year. 1988 will also be a good year. Construction-put-in-place for the first two months of 1988 is up by 20 percent to $353 million. For the first quarter of 1988, residential permits totalled $71 million and were down by 18 percent, while nonresidential permits totalled $84 million, up by 21 percent, respectively. According to the General Contractors Association, Oahu's construction industry is going through a "mini-boom" in 1988 that is benefiting both big and small contractors. This boom is expected to last for the next three years. The fastest growing segment of Oahu's dynamic construction industry in 1988 is remodelling and renovation. Examples are the $100-million Hilton Hawaiian Village renovation and the Waikiki improvement project. Residential renovation projects are also a large part of the market.

Major new commercial projects at various stages of development include the $30 million City Bank building, the $60 million One Waterfront Plaza, and the $140 million Hawaii Prince Hotel. Two projects guaranteed to have an impact on the construction industry in the near future are the H-3 freeway, which is finally out of court, and the huge West Beach development in Ewa.

Residential construction will also be active on Oahu, with the Governor's goal of 64,000 affordable housing units on the market by the year 2000. Permits for single-family units are down by 18 percent, but those for multi-family units are up 15 percent for the first quarter of 1988. The city is also developing its 215-acre West Loch Estate housing project. Most of this residential development will be taking place in Ewa and Central Oahu.

Private developers are also getting into housing. The Lusk Company is applying for permission to build 500 homes on an 80-acre tract near the Kapolei Village in West Oahu. Gentry Pacific has several projects going in the area. Ewa by Gentry, a project consisting of 413 homes at Soda Creek is scheduled for completion by early summer 1988.

MANUFACTURING

Oahu has the majority of Hawaii's $2 billion manufacturing industry. In 1987, 87 percent of the diversified manufacturing and 20 percent of the sugar and pineapple were processed on Oahu.

Petroleum refining enjoyed a good year. Pacific Resources Inc. (PRI) increased its revenues to $955 million, up by 17 percent over 1986. PRI gets its crude oil from Alaska, the Far East, and Australia, and produces a variety of products and services. The fastest growing are PRI's ship bunkering operations and jet fuel production.

In contrast, apparel and textile manufacturing have been declining with jobs going from 3,150 in 1986 to 2,950 in 1987, a drop of 8 percent. This trend has continued into 1988 with the job count falling another 2 percent in the first two months of 1988.

The local apparel market is heavily dependent on the tourism industry. Pomare, the largest retailer of garments on Oahu, sells 95 percent of its merchandise to visitors, mostly westbound. Malia International, on the other hand, exports its fashions to the Mainland, as do other Oahu garment manufacturers.

Whether selling locally or exporting their goods, garment manufacturers agree the industry is going through changes in production methods and customer purchasing habits. Aloha shirts are losing their market share to T-shirts and sportswear with just a hint of print.

High technology manufacturing is an industry quickly maturing in the islands. With new hi-tech parks on Maui, Hawaii, and Oahu, high technology in Hawaii is reaching a new level of organization that will make it the manufacturing industry of the future. Oahu's Mililani Technology Park is the smallest of the three parks, covering 256 acres near the Leilehua Golf Course. Castle & Cooke's Oceanic Properties, owners of the land, will be putting in $15.6 million worth of site preparation, infrastructure, and buildings into the first phase.

Three tenants have already been assigned to lots in the first phase. SETS, a developer of sensing instrumentation and data-processing system software, will be the first to move into the development. In fulfillment of a 1983 agreement, Castle & Cooke is transferring a 4-acre plot to Intelect, a manufacturer of air-traffic control and air-defense voice-switching systems. Intelect will be building its new corporate headquarters on the plot and should be ready for occupancy in 1990. Verifone, a manufacturer of transmission terminals, was the first company to sign an agreement with Oceanic Properties in January. Under the agreement, Oceanic will begin construction in July on a two-story, 34,500 square foot building which will be leased to Verifone.

Beyond this initial stage, Oceanic Properties will not be involved in the construction of buildings, which will be left to the individual companies. Oceanic will prepare the lots and install the infrastructure. Regulations on lot coverage, landscaping requirements and building heights will give the park an open, green, campus-like environment more suitable for research, development, and light industrial manufacturing than assembly-line production.

AGRICULTURE

As on the neighbor islands, Oahu's agriculture is dominated by sugar and pineapple. In 1986, 22 percent of the farm acreage on Oahu was in sugarcane and 10 percent was in pineapple. Employment in sugar decreased by 10 percent in 1987, while jobs in pineapple decreased by 2 percent. This indicates the different situations facing Oahu's two major crops in 1988.

Even with some of the most productive lands in the state and with a majority of the fields drip irrigated, sugar production in 1987 was down for Oahu's two sugar plantations. Waialua Sugar produced 65,000 tons and Oahu Sugar, 94,000 tons for a total of 159,000 tons, down by 6 percent from 1986. Both plantations have seen a reduction in field size in the last two years. Waialua had 13,000 acres, in sugarcane in 1986, but has since transferred 2,000 acres to Castle & Cooke's pineapple operation. Oahu Sugar's fields were trimmed by 1,000 acres since 1986.

This shrinkage scenario will most likely continue as Oahu's growing population and urban needs encroach upon land traditionally used to grow sugarcane. The problem facing the plantations in 1988 is that of compatibility with nearby communities. Complaints have been received by Oahu and Waialua about cane burning. If these

complaints turn into a call for changes, the increased costs could make sugar economically vulnerable.

More urban pressure, in the form of development, is expected in the future as housing needs become more acute. Oahu Sugar Company is facing this pressure today. All of Oahu Sugar's land is leased from the Campbell Estate, the Robinson Estate, and the Navy. The Robinson Estate has already sold 203 acres of Kunia sugar land to a Japanese company that wants to develop a golf course. The estate also has an agreement to take out another 1,500 acres of Kunia land for development. Further in the future, the Kapolei development and the Governor's land bank program in Ewa will take their toll on plantation acreage.

Pineapple producers face a rosier future. The statewide total value of fresh and processed pineapple products and by-products came to $252 million in 1987, up by 6 percent from the previous year. At Dole, the larger of Oahu's two pineapple companies, production levels were unchanged from 1986, but yields were up thanks to better management and agricultural practices. Dole's 8,000 acres should be in drip irrigation by the end of this year. Oahu's other producer, Del Monte, reported an increase in their production over 1986. Both producers are optimistic about the future. Dole sees the fresh fruit market as being a little soft right now, but overall it looks good for 1988. Processed pineapple demand has also been flat; but it is doing better than other canned fruit products. Dole's new juice products, sold nationwide, are doing well with new blends being introduced. Del Monte, which deals exclusively in fresh pineapple, agrees that the outlook for the fresh pineapple market is upbeat for 1988.

In response to this optimism, Dole is renovating its cannery in Iwilei. The $18-million renovation will reduce the size of the factory, and fit it with the latest canning technology. The first phase should be completed in June. In addition, an $8 million state-of-the-art fresh fruit facility is being built, and the visitor center is being expanded in Wahiawa.

Del Monte is in the process of expanding its acreage on Oahu to make up for the scheduled closing of its Molokai operation this year. Of the 5,000 acres now being cultivated about 25 to 33 percent is drip irrigated. That portion will increase as the drip system is installed in more of the plantation's fields this year.

Despite being overshadowed by sugar and pineapple, diversified agriculture is quietly making an impact on Oahu's economy. It employed approximately 2,100 people in 1987 and contributed $126 million to Oahu's gross business receipts. Oahu farmers produced a variety of fruits and vegetables, as well as most of the eggs and milk in the state. Oahu has also historically produced about half of the pork in the state.

In the first two months of 1988, diversified agriculture receipts, at $61 million, were 39 percent higher than they were last year. Leading the expansion were flowers and nursery products and milk production. Flower growers are facing a dynamic market with increased demand for their products.

FINANCE AND REAL ESTATE

While the rest of the nation's banking industry witnessed a record 184 bank failures in 1987, Hawaii bankers celebrated another year of exceptional growth thanks to a strong economy and prudent lending habits. Total assets for banks on Oahu in 1987 came to nearly $12 billion, up by 11 percent from 1986. All banks, except one, shared in the increase. Deposits were also on the rise last year totalling $10 billion, an 8-percent increase over 1986. Bank of Hawaii and First Hawaiian Bank commanded the lion's share with 80 percent of the total deposits. Oahu bankers are optimistic about 1988. As long as the local economy remains strong, prospects for another year of positive growth are good.

The real estate market, like the banking industry, saw increased activity in 1987. Real estate resales numbered 8,000 units and totaled $1.5 billion for an average price of $187,000. In 1986, total sales came to 6,500 units worth $982 million for an average of $152,000. The areas with the most activity were East Oahu ($550 million in sales, almost double the 1986 volume), Waikiki-Makiki-Manoa ($450 million), and Ewa ($225 million).

Prices are on the rise on Oahu due to the dwindling supply of single-family homes and condominiums. In the early months 1988, the number of condominiums and single-family homes available for resale dropped down to 1977-78 levels.

MILITARY

The military has been a vital part of the local economy since the days of World War II, especially on Oahu. With Pearl Harbor, Hickam Air Force Base, Schofield Barracks, and Kaneohe Marine Corp Air Station as well as Fort Shafter, Camp Smith, Barbers Point, and Fort DeRussy all located on Oahu, the military has more impact on Oahu than on any other county. Last year, military expenditures exceeded $2 billion. The Navy contributed approximately $1 billion, the Army $1 billion and the Air Force $200 million. A major portion of these expenditures were spent on Oahu.

To manage the different military bases on Oahu, a majority of the military's personnel is stationed on Oahu. In 1987, 99 percent of the total 125,127 military personnel and dependents in the islands were stationed on Oahu. Likewise, 99 percent of the 20,050 civilian jobs generated in the state by the Air Force, Army, and Navy were located on Oahu.

The military contribution to the local economy has been relatively stable historically. In the last five years, military expenditures increased 10 percent, for an annual average growth rate of 2 percent a year. The number of assigned personnel has been relatively stable. This trend is forecasted to continue in 1988. Some reduction in force and reshuffling of jobs of both military and civilian personnel are expected by the Coast Guard and Air Force this year. These reductions will be made gradually through attrition and will not involve layoffs. The Navy will be assigning another nuclear-powered submarine, with a crew of 133, to Pearl Harbor. It will add $2.7 million to the Navy's annual payroll, and bring with it 79 families who will live on Oahu. The Army's military personnel strength will remain stable through 1988.

Expenditure changes will be similar to those in personnel levels. The Coast Guard will be reducing its expenditures on Oahu as streamlining efforts continue. The Air Force will, likewise, be reducing its expenditures because of reduced employee levels and budget cutbacks. The Navy will be increasing its expenditures slightly. The Army will be increasing construction and military pay (by 2 percent) in 1988.

RETAIL TRADE

Oahu's retailers celebrated another year of increased sales in 1987. A large population, low unemployment, a rise in total personal income and an active visitor industry kept local retailers busy. Gross business receipts show

Oahu retailing brought in $8.4 billion in 1987, up by 10 percent from 1986.

Ala Moana Center, the nation's largest open-air shopping center, did well in 1987. Renovations, remerchandising, and additions like the popular Food Court boosted Ala Moana's sales above $500 million in 1987, up by 18 percent over 1986. Liberty House, women's fashion stores, large department stores, and youth-oriented shops did particularly well last year.

Renovations to the center will carry over into 1988. The big projects will be renovating the former sites of the Carol & Mary and McInerny stores. Store fronts and common areas will also be changing throughout the mall.

While all this activity is going on outside, remerchandising efforts by various stores, such as Liberty House, are going on inside to keep up with a changing clientele. Local shoppers are more fashion conscious than they were 20 years ago, seasonal clothes are more in demand, and tourists are becoming a larger portion of those visiting the center.

Ala Moana is looking forward to another year of growth in 1988. The industry as a whole is also optimistic with receipts through the first two months of 1988, 14 percent above those in 1987. Continuing strength in the local economy should make 1988 another year of increased sales for retailers.

CONCLUSION

The Oahu county economy experienced strong growth in 1987, and most indicators point to a similar performance in 1988. First quarter figures show both gross business receipts and tax collections up significantly over 1987. The unemployment rate has fallen to 3.1 percent. The westbound visitor count is down in the first quarter, but a strong eastbound market suggests visitor expenditures on Oahu will grow even if visitor numbers do not. Construction growth is slowing from previous years, but it is still expanding at a double-digit rate. The military's input into the economy will remain steady. With such positive growth in the local economy, Oahu's challenge in 1988 and beyond may be avoiding inflation caused by an overheating economy, rather than fighting off a recession.

Honolulu County Statistics

	Unit	Period	1983	1984	1985	1986	1987	Jan.-Mar. 1988	% change Jan.-Mar. 1987/1988	% change Annual 1986/1987
Population, Resident	number	July 1	792,700	801,400	811,100	816,700	n.a.	n.a.	n.a.	n.a.
Civilian Labor Force	number	mo. avg.	357,150	357,100	359,600	368,700	384,100p	392,450	5.0	4.2
Employment	number	mo. avg.	336,550	338,050	341,150	352,500	370,600p	380,200	5.6	5.1
Unemployment	number	mo. avg.	20,600	19,100	18,450	16,200	13,750p	12,250	−11.2	−16.4
Unemployment Rate	percent	mo. avg.	5.8	5.3	5.1	4.4	3.5p	3.1	−16.2	−20.5
Total Job Count[1]	number	mo. avg.	357,100	362,200	369,800	379,800	394,900p	399,300	3.6	4.0
Gross Business Receipts	mil. $	total	18,123.3	20,148.2	20,742.1	22,110.9	24,686.4	7,081.5	13.7	11.6
State Tax Collections[2]	mil. $	total	1,106	1,216	1,283	1,422	1,653	441	15.4	16.2
Visitor Expenditures	mil. $	total	2,653.1	2,895.4	3,100.5	3,443.8	4,370.4e	n.a.	n.a.	26.9
Estimated Westbound Visitors	thous.	total	2,591.0	2,901.3	2,828.6	3,146.0	3,070.4p	716.5	−7.7	−2.4
Hotel Inventory[3]	number	February	34,354	36,848	38,600	39,010	38,815	n.a.	n.a.	−0.5[3]
Hotel Occupancy	percent	mo. avg.	76.3	83.0	81.5	85.2	86.8	88.1	−4.9	1.6
Construction Put In Place	mil. $	total	1,144	1,051	1,245	1,586	1,857e	508	17.3	17.1
Private Permits	thous. $	total	366,760	374,904	514,831	533,518	754,043e	155,627	−0.8	41.3
Residential Permits	thous. $	total	213,083	237,708	289,508	332,934	390,505	71,242	−18.0	17.3
Non-Residential Permits	thous. $	total	153,677	137,196	225,323	200,584	363,538	84,385	20.6	81.2
Public Contracts Awarded	thous. $	total	216,989	300,783	177,243	312,404	292,689	84,908	23.6	−6.3
Real Estate Resales										
Single Family	number	total	1,617	1,670	2,072	2,498	2,773	580	21.8	11.0
Average Price	dollars	cum. avg.	183,711	186,171	188,016	212,140	274,824	357,709	41.2	29.5
Condominium	number	total	2,049	2,177	2,738	3,408	4,721	1,154	51.8	38.5
Average Price	dollars	cum. avg.	102,667	103,616	99,597	107,857	124,750	143,982	22.6	15.7
Sugar Production, raw sugar 96°	tons	total	160,631	154,220	161,236	169,357	159,309	9,640	−39.6	−5.9
Pineapple Sales, Fresh Equivalent	thous. $	total	55,277	47,752	54,150	54,180	n.a.	n.a.	n.a.	n.a.
Diversified Crops and Livestock	thous. $	total	70,235	71,376	70,828	74,309	n.a.	n.a.	n.a.	n.a.
Diversified Crops[4]	thous. $	total	25,124	25,318	27,413	29,876	n.a.	n.a.	n.a.	n.a.
Livestock	thous. $	total	45,111	46,058	43,415	44,433	n.a.	n.a.	n.a.	n.a.

[1]*Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once.*

[2]*Totals do not include real property taxes.*

[3]*Compares February, 1987 to February, 1986.*

[4]*Total crops excluding sugar and pineapple.*

n.a. = not available

p = preliminary

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ECONOMIC INDICATORS

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MAUI COUNTY IN 1988

The Maui County economy faltered for the first time in eight years in 1987. Gross business receipts showed a one-percent decline to $1.81 billion in 1987. Prospects look better, however, in 1988. As of April, total gross business receipts came to $540 million, 9 percent higher than 1987. This has caused shortages and bottlenecks, which, although not serious at present, if not taken care of, could cause difficulties in the future.

Maui's labor shortage is an example. Once a sign of a healthy economy, Maui's low unemployment rate is now a concern for many employers. Growth in Maui's civilian labor force has not kept up with the increase in employment. In 1987, the civilian labor force grew by 6.5 percent, while those employed increased by 7.4 percent, resulting in a drop in the unemployment rate to 4.4 percent from 5.3 percent in 1986. May 1988 figures show the unemployment rate down to 3.6 percent.

West Maui was the first area severely hit by the tight labor market. In late 1987, the Westin Maui Hotel turned to Molokai for employees, bringing 66 workers over on a new interisland ferry. The idea has caught on, and now, 18 different businesses are hiring 150 workers from Molokai.

Hotels in Wailea will also see competition for workers as new hotels are built, and "raiding" occurs, luring workers from one hotel to another, not only from Wailea, but also from West Maui resorts.

The tight labor market has now spread to other areas. HC&S plantation in Puunene has had difficulty filling vacancies this year. To make itself more competitive in the labor market, HC&S increased wages last fall for journeyman workers, and implemented a skills-development program. If these improvements do not attract job applicants, HC&S may have to import labor from other islands.

The construction industry is experiencing similar difficulties. Most job applicants are leaving other jobs rather than the ranks of the unemployed. Technical and managerial people are in short supply, and labor is already being brought in from elsewhere.

VISITOR INDUSTRY

In 1987, the westbound visitor count dropped below the two-million mark to 1,906,440 persons, five percent less than in 1986. However, according to the Hawaii Visitors Bureau, 164,300 Japanese overnight-and-longer visitors came to Maui in 1987, making it the top neighbor island destination in the state.

These trends have continued into 1988. The westbound visitor count through May came to 775,830 persons, down one percent from a year ago. Japanese visitors are expected to show dynamic growth again in 1988.

However, despite the increase in Japanese visitors, westbound visitors are still the core of the Maui visitor industry. Their declining number has affected hotel occupancy rates. As of the first five months of 1988, occupancy has declined by six percent from last year for a cumulative average of 76 percent. Hotels in Kaanapali reported an 83-percent occupancy rate through April, down from 90 percent for the same period last year. Part of the drop was due to the Westin Maui coming on line this year with 756 rooms. Overall, the hotel and condominium inventory on Maui increased by 10 percent to 15,168 units as of this past February. The Maui Prince Hotel in Makena reported their occupancy level as unchanged from last year, which was below expectations. The Wailea resort reported slightly lower occupancy levels than at the beginning of 1987. Hotel Hana Maui reported low occupancy rates for the first quarter of 1988, partially due to renovation work in 1987. The rest of the year looks more optimistic.

The condominium market is in a similar situation. Due to the reduction in westbound visitors, occupancy levels are down eight to ten percent from last year, with no substantial increases in occupancy expected for later in the year. Advanced bookings indicate condominiums will do well if they match last year's performance.

In spite of the slow market, hotel developers are proceeding with new properties. Construction of Maui Land & Pineapple's 450-room Ritz-Carlton Kapalua Hotel is scheduled to begin by the end of 1988. Occupancy is planned for 1990, assuming the fourth lane to Honoapiilani Highway is completed by then. The Embassy Suites Maui Hotel in Kaanapali is scheduled to open in early 1989, when it will add 415 suites to the resort. Amfac's North Beach project is in the Special-Management-Authority permit application phase. Construction on the 400-room hotel should begin soon, with occupancy planned for 1992.

Development in the Wailea resort is getting into full swing. The Grand Hyatt and the Four Seasons hotels are now under constructon. The 460-unit Embassy Suites is in the zoning process. The 812-unit Grand Hyatt is scheduled to open in early 1990. The Four Seasons will open a year earlier in 1989. Also, 102 of the total 188 Grand Champion Villas condominiums are also near completion.

On the island of Lanai, construction of the Koele Lodge and Manele Bay Hotel has begun. The Koele Lodge is expected to open in September 1988, adding 102 rooms to Lanai's inventory. A year later, the Manele Bay Hotel is

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expected to add another 250 rooms.

The most popular visitor attraction on Maui, the Maui Tropical Plantation, is also undergoing change. An admission-fee policy is being fine tuned. An historical characters exhibit has been added. Fruit-testing, coconut-husking, and lei-making demonstrations are now held daily. Bird shows and a Hawaiian Barbecue are staged several times a week. The plantation attracted about 475,000 visitors in 1987, and a similar turnout is expected in 1988.

Ocean activities, like snorkeling trips to Molokini and jet-ski rentals, have become very popular with Maui visitors. One example, windsurfing, has single-handedly revived the economy of Maui's north shore. Its reputation as the ultimate windsurfing destination is attracting windsurfers from around the world. According to a survey of 30 windsurfing stores on Maui, $11 million sales of windsurfing-related products are expected in 1988.

Kahului Airport will be upgraded to accommodate the projected increase in visitors in the years ahead. First-phase construction of the $41-million project will begin in 1988, and include an 82,000 square-foot lobby, a two-story 78,000 square-foot central building, and a 45,000 square-foot concourse and holding area. Phase II will begin by 1991 with the conversion of the present terminal into a baggage claim area.

SUGAR

Maui's sugar industry produced 299,948 tons of sugar in 1987, down by one percent. HC&S increased its output by two percent to 232,718 tons, and increased productivity to 14.7 tons per acre compared to 14 tons per acre in 1986. Pioneer Mill's production fell to 47,667 tons in 1987, down by 11 percent, with productivity down to 12.7 tons sugar per acre in 1987. Wailuku Agribusiness also had a one-percent drop in production to 19,609 tons of sugar.

Production is expected to be down by one percent in 1988. HC&S is forecasting a year-end harvest similar to last year, Pioneer Mill is projecting a decrease to 47,274 tons, and is test planting cocoa as an alternative crop. Wailuku Agribusiness, harvesting its last sugar crop after 126 years, will bring in just under 18,000 tons in 1988.

This year, some of Hawaii's sugar plantations, including HC&S, will be trying a new processing procedure. Starting in June, about 60 percent of the sugar sent to the C&H refinery in California will be Very Low Color (VLC) sugar. More refining will be done at the plantations before shipment. Cost of production at the plantations (HC&S had to install additional equipment) will increase, but refining costs at C&H will decline. This should produce a net gain for both parties. HC&S has also come out with a less refined sugar in a variety of crystal sizes and shades of brown known as Maui Brand Raw Sugar. It is targeted for the retail and visitor markets, and can be used like regular sugar.

PINEAPPLE

The pineapple industry is gearing up for moderate growth in 1988 despite Del Monte leaving Molokai. Maui Pineapple Company harvested over 200,000 tons of pineapple in 1987 and expects about that much in 1988. Wailuku Agribusiness has 1,000 acres in pineapple now and is projecting a 17,000-ton harvest for 1988.

Pineapple acreage will continue to rise in the coming years. Maui Pine is converting land formerly leased to Pioneer Mill back into pineapple. Wailuku Agribusiness will have close to 2,300 acres in pineapple over the next three years and will be investing in equipment to increase harvesting efficiency. Maui Pine will be expanding its cannery over the next six years. The partnership between Wailuku Agribusiness and Maui Pineapple has proven to be mutually beneficial so far. Wailuku is marketing its production through Maui Pine's private-label market, allowing Maui Pine to better utilize their fields and take less efficient fields out of production.

DIVERSIFIED AGRICULTURE

Thanks to mild weather and ample water supplies, diversified agriculture is having a better year in 1988 than in 1987. Overall, vegetable and melon production through May was up by five percent. Head cabbage, watermelon, and tomatoes were the big money makers in 1987 and are leading the way again in 1988. Head lettuce is having a hard time this year because of persistent crop disease, but it is being replaced by broccoli and cauliflower.

Due to increased export demand, tropical flowers are the fastest growing crop on Maui, with production and acreage rapidly expanding. Some protea farmers have begun growing tropical flowers during the protea off-season. Hana has become the center for tropical flowers on Maui.

Wailuku Agribusiness' macadamia-nut production is also on the rise. Over one-million pounds were shipped to the Big Island for processing in 1987, and production is expected to double in 1988. The 1,350-acre orchard is still maturing, so increased yields are expected for the next eight to ten years. Wailuku Agribusiness is mechanizing its harvesting methods. Hawaiian Host, which has agreed to buy Wailuku's production, plans to build a drying and cracking plant on Maui within five years.

After a bad year in 1987, Tedeschi Vineyards is expecting its second largest harvest ever. About 80 tons of grapes should be harvested from their 25-acre vineyard and will go into their award-winning champagne, a blush wine, and a new red wine. They will also continue their very popular pineapple wine. Sales should exceed $1 million for the first time in 1988. The winery is testing two new grape varieties in 1988. They will build four new tanks to increase storage capacity by 10,000 gallons. Tours of the winery have begun. The tasting room will be enlarged, and a picnic area will be set up to accommodate more visitors.

CONSTRUCTION

The construction industry on Maui had a year of moderate growth in 1987. Total construction-put-in-place came to $101 million, up by nine percent over 1986. The pace has quickened in 1988. Cumulative totals through April show construction up by 27 percent at $40 million. Large hotel projects make up about 25 percent of the present construction underway. The other 75 percent is made up of commercial development in Kihei and Wailuku, renovation work to Maui schools, and housing projects. Given a stable economy and available financing, this level of construction will continue until the summer of 1990.

Private permits authorized for February indicate healthy growth for housing as well as hotel and commercial projects. Residential permits were up by 63 percent, while nonresidential permits increased by 99 percent. This is good news to the county. Nonresidential construction continues to be strong. At the same time, county, state and private developers all have projects in the works that will help alleviate Maui's housing shortage. For example, the Komohana Hale project in West Maui will provide 42 duplex and 20 rental units. Construction is scheduled to begin on the 107-lot Ohukai subdivision in Kihei. Later on this year, the county hopes to get started on a 62-unit project near Maunaloa on Molokai.

The state is also stepping up its affordable-housing

efforts. The Honokowai or Wahikuli area has been targeted as part of the Governor's affordable-housing plan. It calls for 3,800 units on more than 650 acres. The county would also like the state to get started on affordable housing on another 10 to 12 acres in Honokowai and 150 to 200 rental units on about 20 acres of land in Wahikuli near the Lahaina Civic Center. The state's Waiehu subdivision has sold 79 units in the first increment, and construction has begun on the 100 units in the second increment.

Private developers have also been active. Maui Land & Pine has plans for a subdivision in Napili. Alexander & Baldwin's 1,040-acre Maui Lani subdivision is being held up by sewage-capacity problems, but their 42-lot subdivision in Sprecklesville will be underway by the end of the year. Baldwin Pacific's Piilani subdivision in Kihei has passed first reading by the County Council. The next step will be applying for a Special-Management-Authority permit. Once completed, the subdivision will have 455 detached single-family homes and 330 multi-family homes. Rosewood Hotels Inc. is building 60 units for its employees in Hana. On Lanai, construction will begin on the 144-unit Lalakoa III subdivision near Lanai City.

Starting in 1988, hotel developers will be required by the county to provide one housing unit for every six hotel rooms developed with money or land for housing no longer accepted as a substitute. The county believes this is the best way to build up the county's inadequate rental inventory. Occupancy permits will not be issued until the units are in place. Hotel developments affected by this change will be Amfac's North Beach project and the Ritz-Carlton Kapalua.

All this development will put a greater burden on county infrastructure. Traffic has been a problem in West Maui for some time. The county is moving to widen the Honoapiilani Highway. Construction on the new fourth lane in Lahaina will begin this year and is scheduled for completion in 1990. The Lahaina Bypass road, has fallen about two months behind schedule. Route selection has proven more difficult than anticipated. Work on the environmental impact statement is being held up until the route is selected.

Sewage-disposal capacity is the latest bottleneck to affect development. Inadequate capacity has stalled projects in Kahului and Wailea. A&B's Maui Lani subdivision is on hold until major users build a new treatment plant at an inland site. It will have a capacity of 4.2 million gallons per day, cost up to $25 million, and take up to three years to complete. No new developments will be approved for the Wailea area until the present Kihei sewage treatment plant is expanded. The county has ordered the developers in the area to study the cost of expanding the old plant.

To avoid future water shortages, the county is beginning the first phase of its water master plan. It calls for the installation of a 36-inch transmission system for upper Kula. The $8-million project is now in the contract finalization stage. The second phase, a new Kula reservoir system, is planned to begin by the end of 1988. It will include two reservoirs with a 400-million-gallon capacity. On Molokai, one well is being drilled by the county as an alternative source to the present reservoir.

HIGH TECHNOLOGY INDUSTRIES

Activity at the astronomy facility atop Haleakala is proceeding at a steady pace. The University of Hawaii Institute of Astronomy, through its two ongoing projects, will inject $950,000 into the Maui economy. AVCO Research Laboratory, Inc., a subsidiary of Textron, Inc., will add another $8 million through its contract work.

Maui's Kihei R & T Park is finally underway. The Air-Force funded antenna facility has been completed. Relay-measurement experiments will be conducted by early next year. The park's R & T Center is scheduled for completion by the end of 1989. The three-building complex will be run by the University of Hawaii, which will occupy 20 percent of the space. Other possible tenants for the park include a soil research station connected with NIFTAL, and a renewable resource facility.

Maui Electric Company (MECO) experienced an eight-percent load growth in the last two years, and a ten-percent increase through May of 1988 due to tourism growth, hot weather, and housing development. Further increases are expected over the next three years, especially with the completion of several hotels in Wailea, Kaanapali, and Kapalua. In addition, MECO's plans to purchase the Lanai electricity system are now under review by the Public Utilities Commission. MECO is also negotiating to purchase the Molokai system. These expansion moves will push MECO's generation capacity to the limit in the next three years.

To accommodate this growth, MECO installed two 2.5-megawatt generating units in March, 1987. Another 12.5-megawatt unit was dedicated in April of this year at Maalaea. A twin unit will be ready in June, 1989. Further down the line, another 12.5-megawatt unit will be needed by 1991. A new power plant will also be needed on Lanai to handle its load, which is expected to double by 1990.

To supplement its own power generation, MECO is also purchasing power from HC&S sugar plantation. The plantation's commitment calls for 12 megawatts of power plus any extra power they generate using their bagasse and coal-burning facility. HC&S and MECO are now negotiating to increase the plantation's electrical output.

RETAILING

General excise tax data indicate that Maui retailers suffered a slowdown in 1987 due to slow tourism growth. Revenue dropped by two percent to $735 million in 1987. In 1988, the retailing industry is doing much better with revenue through April increasing by four percent to $241 million.

Sales at the Lahaina Cannery Shopping Center are 15 percent ahead of last year after a bad January and February. The Cannery expects to maintain this growth rate to the end of the year. Most of the stores are doing well with low-end stores doing better in the summer and high-end stores doing better in the winter. The Center should be 95 percent occupied by July.

As of March the Kaahumanu Shopping Center in Kahului was nine percent ahead of last year in sales. Depending on Christmas, the shopping center forecasts nine-to ten-percent sales growth in 1988. Anchor tenants Liberty House and Sears are doing well in 1988. So are specialty shops with some reporting 50-percent increases in sales through March. The center is adjusting its tenant mix and was 90 percent occupied in June.

The Maui Mall, also in Kahului, had a good year in 1987 with sales topping 1986 by six percent. The center will undergo a $300,000 renovation in 1988 and expects 1988 sales to be ahead of last year.

REAL ESTATE

Maui real estate prices have shot up recently. Residential property values are up by 12 percent over last year. Commercial and hotel/resort properties have increased even more, experiencing a 14-percent rise over the previous year. Maui's overall taxable real property valuation for 1989 is projected to be up by over ten percent to $7 billion.

Several reasons for this increase have been identified. Growing demand and a slowdown in housing starts have put upward pressure on the price of homes. Windsurfing and Japanese investors are part of the growing demand in certain areas. In Paia, shoreline property values have increased an average of 40 percent because of the influx of windsurfers. The Japanese have had the most influence in the luxury markets of Kapalua, Kaanapali, and Wailea.

Commercial property is also in great demand. There is virtually no light industrial space available for rent in Kahului. The inventory of retail space in Kihei is increasing, but being absorbed quickly as demand remains strong.

Developers are moving to satisfy this demand. A&B is opening its Wakea Business Center II, a warehousing facility, in September. The remaining 13 acres of the Dairy Road triangle will be developed by the end of the year, and Phase II involving another 15 acres across Dairy Road will be improved soon after. Kihei will be seeing development of several shopping centers. The county has approved nearly 300,000 square feet of commercial and office space, including projects like the 44,750 square-foot Longs Retail/Business Center, the 60,000 square-foot Phase II of the Azeka Shopping Center, and nearly 20,000 square feet in the Dolphin Shopping Center project. It is unknown how much inventory the market can handle, but as long as the economy of Maui remains strong, demand will be brisk.

CONCLUSION

Despite an off year in 1987 and a continued slowdown in the county's visitor industry, the Maui economy is growing vigorously in 1988. With the construction industry growing by 26 percent, diversified agriculture prospering, and both sugar and pineapple production becoming more efficient, the Maui economy should return to positive growth in 1988.

However, infrastructure bottlenecks in the form of inadequate roads and sewage-capacity problems have forced the county to slow development in some areas. Added to shortages in labor and housing, and it looks like Maui may be expanding faster than resources permit. But, with the county stressing growth management and working with the private sector to address these problems, Maui has a good chance to achieve a balanced program of growth.

Maui County Statistics

	Unit	Period	1983	1984	1985	1986	1987	Jan.-May 1988	% change Jan.-May 1987/1988	% change Annual 1987/1986
Population, Resident	number	July 1	79,869	83,519	85,303	87,600	n.a.	n.a.	n.a.	n.a.
Civilian Labor Force	number	mo. avg.	44,850	44,950	46,950	48,600	51,750	51,800	1.2	6.5
Employment	number	mo. avg.	41,450	42,250	44,150	46,050	49,450	49,900	1.9	7.4
Unemployment	number	mo. avg.	3,400	2,700	2,800	2,550	2,250	1,900	−15.6	−11.8
Unemployment Rate	percent	mo. avg.	7.6	6.0	5.9	5.3	4.4	3.6	−18.2	−17.0
Total Job Count[1]	number	mo. avg.	37,850	38,950	41,100	42,500	45,100	44,950	0.4	6.1
Gross Business Receipts	mil. $	total	1,376.2	1,613.7	1,694.7	1,842.6	1,816.3	657.6[2]	9.0	−1.4
State Tax Collections[3]	thous. $	total	68,217	76,573	82,941	101,409	117,917	49,363	5.6	16.3
Visitor Expenditures	mil. $	total	792.9	1,078.3	1,105.7	1,195.5	1,267.7	n.a.	n.a.	6.0
Estimated Westbound Visitors	thous.	total	1,645.7	1,854.7	1,831.1	2,001.9	1,908.8	775.8	−1.4	−4.7
Hotel Inventory	number	Feb.	12,749	13,138	14,152	14,096	13,849	15,168	9.5[4]	−1.8
Hotel Occupancy[5]	percent	mo. avg.	75.2	80.5	78.5	81.5	76.2	76.1	−6.0	−6.5
Construction Put In Place	thous. $	total	66,952	68,593	73,527	92,586	100,731	39,982[2]	26.7	8.8
Private Permits	thous. $	total	91,249	59,841	178,633	153,047	163,788	34,461[6]	74.1	7.0
Residential Permits	thous. $	total	38,814	40,887	145,915	104,749	106,743	22,162[6]	62.6	1.9
Non-Residential Permits	thous. $	total	52,435	18,954	32,718	48,298	57,045	12,299[6]	99.3	18.1
Public Contracts Awarded	thous. $	total	29,942	26,759	37,766	58,738	25,454	21,548	113.3	−56.7
Real Estate Resales										
Single-Family	number	total	185	201	259	386	435	216	9.1	12.7
Average Price	dollars	cum. avg.	155,095	175,494	151,865	174,763	189,687	240,401	29.5	8.5
Condominium	number	total	381	386	424	669	848	414	12.5	26.8
Average Price	dollars	cum. avg.	151,169	141,763	123,471	142,717	146,404	171,165	22.7	2.6
Sugar Production, raw sugar 96	thous. tons	total	287	300	290	303	300	108	40.3	−1.0
Pineapple Sales, Fresh Equivalent	thous. $	total	45,099	42,176	36,380	45,540	n.a.	n.a.	n.a.	n.a.
Diversified Crops and Livestock	thous. $	total	29,728	30,643	31,524	31,202	n.a.	n.a.	n.a.	n.a.
Diversified Crops[7]	thous. $	total	17,335	18,122	19,309	19,496	n.a.	n.a.	n.a.	n.a.
Livestock	thous. $	total	12,393	12,521	12,215	11,706	n.a.	n.a.	n.a.	n.a.

[1] *Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once.*
[2] *January-April 1988.*
[3] *Totals do not include real property taxes.*
[4] *Compares February, 1988 to February, 1987.*
[5] *For Maui Island only.*
[6] *January-February 1988.*
[7] *Total crops excluding sugar and pineapple.*
n.a. = not available

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